

CD NO.

SUPPLEMENT TO
REPORT NO.

THIS IS UNEVALUATED INFORMATION

MEASURES TO INCREASE OUTPUT OF ASBESTOS PIPE IN USSR

According to information from the Ministry of Agriculture and the Institute of Hydraulic Engineering and Land Improvement, almost 70 percent of the pipe required for irrigation systems and agricultural water supply consists of 5-atmosphere piping. This fact has great significance since the production of low-pressure pipe, which has a thinner wall than the high-pressure variety, requires 20-30 percent less asbestos-cement bulk. For example, 21.4 tons of asbestos-cement are required for the manufacture of one linear kilometer of pipe with a diameter of 200 millimeters and a pressure of 8-10 atmospheres,

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while for the same quantity of 5-atmospheric piping only 17.6 tons are required. This means that in the manufacture of low-pressure pipe, an equal quantity of asbestos-cement makes possible a 20-percent increase in output, in terms of linear kilometers.

The interests of the state urgently require organization of the production of low-pressure pipe. This requires no additional equipment, nor does it require any change in technological processes. To increase the output of the item, and to add to the variety, it will be necessary to increase the number of shaping pistons available in construction-materials plants. This leaves two alternatives: It would be necessary either to use asbestos-cement pistons, which have been used successfully for the production of high-pressure pipe, or to adapt the old steel pistons, which are available at the plants of "Glavshifer" and which on the basis of the recently introduced standards are at present ineffective.

There is still one other instance where organization of the production of low-pressure pipe would be beneficial. The effectiveness of asbestos pipe, according to the quantity of metal which it replaces, depends on its diameter, since the thickness of the walls grows significantly with increasing diameter. For example: One linear meter of asbestos-cement pipe with a diameter of 150 millimeters is 2.6 times lighter than cast iron, but when it has a diameter of 600 millimeters, it is only 1.4 times lighter. This means that the effectiveness of asbestos-cement pipe products is inversely proportional to an increase of their diameter.

It should be noted that shortcomings exist in the system of planning for the production of asbestos pipe in that the plan only calls for the production of a certain number of kilometers without a specification of type. The fact that indexes of pressure and diameter are lacking in the annual plans means that the slate industry does not have adequate instructions for the type of production necessary for the national economy and uses up asbestos-cement irrationally.

The rapid organization of the production of low-pressure asbestos pipe, and better regulated planning will permit the annual conservation of large quantities of asbestos and cement and make it possible effectively to increase the output of pipe for the various branches of the national economy.

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